

ABSTRACT OF THE DISCLOSURE

RECEIVER

1 A receiver is operable to detect and recover data from at least one set of
received signal samples. The signal samples comprise a plurality of data bearing
5 signal samples and a plurality of guard signal samples before or after the data bearing
signal sample, the guard signal samples being formed by repeating a plurality of the
data bearing signal samples. The receiver comprises a matched filter having a
matched impulse response, a controller operable to adapt the impulse response of the
matched filter to the signal samples of the guard signal samples, the matched filter
10 being operable to produce an output signal which is representative of the convolution
of the guard signal samples of the set with the received signal samples. A
synchronisation detector is operable to estimate the location of a sync position, from a
distribution of energy of the matched filter output signal with respect to the received
samples, the sync position providing the position of a window of the received signal
15 samples from which the data may be recovered from the data bearing signal samples.
The receiver can provide an improvement in the detection of the data bearing signal
samples within the set of signal samples, by providing a more reliable estimate of the
synchronisation position. The receiver can be used for recovering data from signals
modulated in accordance with Orthogonal Frequency Division Multiplexing (OFDM)
20 and finds application as a receiver for Digital Video Broadcast (DVB) signals.

[Figure 5]